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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | | |
|---|--|----------------------|---------------------|-------------------|--|--|
| 09/926,132 | 09/07/2001 | Yves Chevallier | 213512US0XPCT | 7805 | | |
| 22850 7 | 7590 08/01/2003 | • | | • | | |
| OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. | | | EXAMINER | | | |
| | 1940 DUKE STREET ALEXANDRIA, VA 22314 | | | MUSSER, BARBARA J | | |
| | | | ART UNIT | PAPER NUMBER | | |
| | | 1733 | | | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| • | | | | | (XL | | | |
|--|--|--|--|---|---------------|--|--|--|
| | | Application No. | | Applicant(s) | | | | |
| Office Action Summary | | 09/926,132 | | CHEVALLIER ET AL. | | | | |
| | | Examiner | | Art Unit | | | | |
| | | Barbara J. Musse | | 1733 | | | | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | | | | | |
| THE I - Externanter - If the - If NC - Failu - Any r | ORTENED STATUTORY PERIOD FOR REPL MAILING DATE OF THIS COMMUNICATION. Insions of time may be available under the provisions of 37 CFR 1. SIX (6) MONTHS from the mailing date of this communication. Period for reply specified above is less than thirty (30) days, a represent of the reply is specified above, the maximum statutory period reto reply within the set or extended period for reply will, by stature ply received by the Office later than three months after the mailing digital patent term adjustment. See 37 CFR 1.704(b). | 136(a). In no event, howen bly within the statutory min will apply and will expire te, cause the application to | ever, may a reply be tim imum of thirty (30) days SIX (6) MONTHS from to become ABANDONED | ely filed will be considered timely he mailing date of this co 0 (35 U.S.C. § 133). | | | | |
| 1)⊠ | Responsive to communication(s) filed on 20 | <u>May 2003</u> . | | | | | | |
| 2a)□ | This action is FINAL . 2b)⊠ T | his action is non-fi | nal. | | | | | |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | | | | |
| | on of Claims | | | | | | | |
| | Claim(s) <u>4-16</u> is/are pending in the application | | | | | | | |
| | 4a) Of the above claim(s) is/are withdra | awn from consider | ation. | | | | | |
| · · | Claim(s) is/are allowed. | | | | | | | |
| · | Claim(s) <u>4-16</u> is/are rejected. | | | | | | | |
| · | Claim(s) is/are objected to. | | | | | | | |
| | Claim(s) are subject to restriction and/on Papers | or election require | ment. | | | | | |
| 9)[| The specification is objected to by the Examin | er. | | | | | | |
| 10) 🔲 - | The drawing(s) filed on is/are: a)☐ acce | epted or b)□ object | ed to by the Exar | niner. | | | | |
| | Applicant may not request that any objection to the | | <u> </u> | , , | | | | |
| 11)☐ The proposed drawing correction filed on is: a)☐ approved b)☐ disapproved by the Examiner. | | | | | | | | |
| If approved, corrected drawings are required in reply to this Office action. | | | | | | | | |
| 12)☐ The oath or declaration is objected to by the Examiner. | | | | | | | | |
| Priority ι | ınder 35 U.S.C. §§ 119 and 120 | | | | | | | |
| 13) | Acknowledgment is made of a claim for foreign | n priority under 35 | 5 U.S.C. § 119(a) | -(d) or (f). | | | | |
| a)[| ☐ All b)☐ Some * c)☐ None of: | | | | | | | |
| | 1. Certified copies of the priority documen | its have been rece | ived. | | | | | |
| | 2. Certified copies of the priority documen | its have been rece | ived in Application | on No | | | | |
| * S | 3. Copies of the certified copies of the pricapplication from the International Bisee the attached detailed Office action for a lis | ureau (PCT Rule 1 | 7.2(a)). | | Stage | | | |
| 14) 🗌 A | cknowledgment is made of a claim for domes | tic priority under 3 | 5 U.S.C. § 119(e |) (to a provisional | application). | | | |
| a) ☐ The translation of the foreign language provisional application has been received. | | | | | | | | |
| | Acknowledgment is made of a claim for domes | • • | | | | | | |
| Attachmen | t(s) | | | | | | | |
| 2) Notic 3) Inform | e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449) Paper No(s) | 4) | | (PTO-413) Paper No(atent Application (PT0 | | | | |
| J.S. Patent and To PTO-326 (Re | | ction Summary | | Part of Paper No. 7 | | | | |

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DETAILED ACTION

Information Disclosure Statement

1. The references on the European search report have been considered but have not been made of record as no PTO 1449 listing the references has been sent.

Claim Rejections - 35 USC § 112

- 2. The following is a quotation of the second paragraph of 35 U.S.C. 112:
 - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 3. Claims 5 and 6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 5, it is unclear how a hollow cavity can have a greater width than itself. It is suggested that "the hollow cavity" in line 2 is intended to be "the second hollow cavity".

Regarding claim 6, it is unclear how this further limits the claims as the width of the hollow cavity would be equal to itself. It is suggested that "the hollow cavity" in line 2 is intended to be "the second hollow cavity".

Regarding claims 5 and 6, it is unclear what direction is meant by width as applicant has not defined the direction in which it is measured. It is unclear if the width is the direction measured perpendicular to the face of the adhesive stack or parallel to it.

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Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claims 4-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art in view of Parker(U.S. Patent 4,973,371), Clark(U.S. Patent 4,351,686) and Waldenberger(U.S. Patent 4,839,206).

The first process of the admitted prior art discloses pre-molding a silicone resin part, applying a silicone adhesive layer to a substrate and then applying the silicone resin part to the adhesive. (Pg. 1) While the first admitted prior art process does not disclose the silicone resin part is injection molded, the second process of the admitted prior art discloses the silicone resin part is injection molded. It would have been obvious to one of ordinary skill in the art at the time the invention was made to injection mold the pre-molded silicone resin part since the first admitted prior art process discloses it is molded, since injection molding is a conventional molding process, and since the second process of the admitted prior art discloses that it is known to injection mold silicone resin parts. Such a mold would have at least two parts to enable the part to be removed from the mold.

The admitted prior art does not disclose injection molding the silicone resin part against the adhesive layer. Parker discloses that in injection molding in general mold release agents are used which an cause poor adhesion of subsequently applied

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materials to the injection molded part.(Col. 1, II. 11-25) Instead the reference applies a laminate to the mold surface comprising a low strength adhesive to hold the laminate in place, a release sheet, a high strength adhesive, and a barrier layer.(Abstract) It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply a laminate of a low strength adhesive, a release sheet, and a high strength adhesive to the interior of the mold of the admitted prior art since this would prevent mold release agents on the mold from contaminating the surface of the silicone resin causing poor adhesive.(Col. 1, II. 11-25)

The references do not disclose the laminate containing a silicone adhesive layer, a substrate and a non-silicone adhesive layer between the barrier layer and the release layer. Clark discloses it is difficult to bond materials to silicone containing surfaces and that a way to fix the problem is to bond a silicone adhesive to the silicone surface and the apply a non-silicone adhesive to the silicone adhesive. (Col. 1, II. 5-10, Abstract) It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a non-silicone adhesive in combination with a silicone one to allow better bonding of materials to silicone surfaces. (Col. 1, II. 5-10) While the reference suggests bonding the adhesives, the method of the reference cannot be used as it is applying the adhesive to a preformed object. Double-sided adhesive tapes with different adhesives on different sides are known per se in the bonding arts. Waldenberger discloses an adhesive tape with a silicone compound on one side and a different adhesive on the other. (Col. 1, II. 66- Col. 2, II. 3; Col. 2, II. 49-51) It would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the adhesive of the

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admitted prior art and Parker with the double-sided tape of Waldenberger since Clark discloses it is difficult to bond materials to silicone objects and that non-silicone adhesive applied to the object allows easy usage by the consumer(Col. 1, II. 21-24) and since double-sided tapes with silicone adhesive on one side are known in the bonding arts for attaching items having low surface energy such as silicone resin to items with higher surface energy.(Abstract)

Regarding claims 5 and 6, the admitted prior art does not disclose the size of the injection mold parts. However, the size of the mold halves is dependent on the article being formed and its shape. One in the art would appreciate that the molds could be made to any size depending on the area the adhesive is intended to cover in the molded part.

Regarding claims 7 and 8, one in the art would understand that the mold should be made from materials which will not react with the article being formed. Such materials are well-known to the ordinary artisan and would be within the purview of one in the art.

Regarding claim 9, Parker discloses the layers of the laminate should be the same size. Therefore they would completely cover each other.

Regarding claim 10, Parker discloses using a low strength adhesive to bond the laminate to the mold wall.(Figure 2)

Regarding claim 12, Parker discloses removing the release layer to expose the adhesive allowing the part to be bonded.(Col. 2, II. 47-51)

Regarding claims 14-16, the admitted prior art discloses the silicone part can used as a seal, blocking joint, or damper.(Pg. 1, II. 14-15)

Response to Arguments

6. Applicant's arguments with respect to claims 1-3 have been considered but are moot in view of the new ground(s) of rejection.

Regarding applicant's argument that the references do not disclose a silicone adhesive, the independent claim des not require a silicone based adhesive.

Regarding applicant's argument as to the differences between silicone resins and silicone rubbers, examiner agrees they are different materials but considers that they have many of the same properties such as low surface energy, and that a reference directed to silicone rubber would be applicable if it were directed to properties common to both the resin and the rubber such as low surface energy.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Barbara J. Musser** whose telephone number is **(703)-305-1352**. The examiner can normally be reached on Monday-Thursday; alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Ball can be reached on 703-308-2058. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

BJM

July 28, 2003

Michael W. Ball
Supervisory Patent Examiner
Technology Center 1700

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